Amendment to the Claims

This listing of the claims will replace all previous versions, and listings, of claims in the application:

1. (Currently Amended) A method of encoding information, the method comprising:

identifying a length of information to be sent in a block code; and

encoding the information to be sent in the block code into ~~one~~ two or more codewords comprising a first codeword and a last codeword, the ~~step of~~ encoding comprising:

balancing codeword lengths to be approximately equal for at least a portion of the ~~one~~ two or more codewords, before the last codeword; and

setting code rates of the ~~one~~ two or more codewords such that the last codeword has a lower code rate than the first codeword, ~~such that~~

wherein a substantially similar codeword error probability is achieved for each codeword ~~considering available decoding time~~; and

further wherein a time for decoding ~~a~~ the last codeword ~~will be~~ is less than ~~available decoding~~ a time for decoding ~~a~~ the first codeword.

2. (Canceled).

3. (Previously presented) The method of claim 1 wherein encoding is performed by a low density parity check (LDPC) encoder.

4. (Previously presented) The method of claim 1 wherein encoding includes setting the code rates of the one or more codewords based on a forward error correction algorithm.

5. (Currently amended) The method of claim 4 wherein the forward error correction algorithm determines:

(A) if the length is less than or equal to X bits ~~(~~, where X is a positive integer~~)~~, then one codeword is used; else,

(B) if the length is greater than X bits and less than or equal to Y bits-(, where Y is a positive integer greater than X), then two codewords are used and wherein the information to be sent in the block code is divided substantially equally between the two codewords; else,

(C) if the length is greater than Y bits, then three or more codewords are used and wherein a code rate of the last codeword is set lower than a code rate of the first codeword.

6. (Original) The method of claim 5 wherein if an amount of information in the last codeword would be less than one half of an amount of information in the first codeword, (C) further comprises dividing a remainder of the information to be sent substantially equally between last two codewords.

7. (Original) The method of claim 1 wherein encoding includes setting code rates of two last codewords to be lower than a code rate of the first codeword.

8. (Original) The method of claim 1 further comprising modulating the block code into an orthogonal frequency division multiplexing (OFDM) multi-carrier signal.

9. (Original) The method of claim 1 further comprising broadcasting the encoded block code using one or more antennas.

10-42. (Canceled)

43. (New) The method of claim 1, wherein the encoding is based on a balancing algorithm configured to ensure that a number of codewords and/or an amount of information in each codeword are selected so that a code rate of each codeword never falls below a minimum threshold value.

44. (New) The method of claim 1, further comprising balancing an overall error protection for each codeword without restricting a number of decoding iterations of all

codewords to an amount of iterations for which the last codeword is limited due to a restrictive decoding latency requirements.

45. (New) An apparatus for encoding information, the apparatus comprising:

a controller configured to identify a length of information to be sent in a block code; and

a encoder configured to encode the information to be sent in the block code into two or more codewords comprising a first codeword and a last codeword, wherein the encoder is configured to balance codeword lengths to be approximately equal for at least a portion of the two or more codewords, before the last codeword and configured to set code rates of the two or more codewords such that the last codeword has a lower code rate than the first codeword, wherein a substantially similar codeword error probability is achieved for each codeword and further wherein a time for decoding the last codeword is less than a time for decoding the first codeword.

46. (New) The apparatus of claim 45, wherein the encoder is a low density parity check encoder.

47. (New) The apparatus of claim 45, wherein the encoder is configured to set the code rates of the one or more codewords based on a forward error correction algorithm.

48. (New) The apparatus of claim 47, wherein the forward error correction algorithm is configured to determine:

(A) if the length is less than or equal to X bits, where X is a positive integer, then one codeword is used; else,

(B) if the length is greater than X bits and less than or equal to Y bits, where Y is a positive integer greater than X, then two codewords are used and wherein the information to be sent in the block code is divided substantially equally between the two codewords; else,

(C) if the length is greater than Y bits, then three or more codewords are used and wherein a code rate of the last codeword is set lower than a code rate of the first codeword.

49. (New) The apparatus of claim 48, wherein the forward error correction algorithm is further configured to determine if an amount of information in the last codeword would be less than one half of an amount of information in the first codeword, (C) divide a remainder of the information to be sent substantially equally between last two codewords.

50. (New) The apparatus of claim 45 wherein the encoder is configured to set code rates of two last codewords to be lower than a code rate of the first codeword.

51. (New) The apparatus of claim 45, further comprising:

a modular configured to modulate the block code into an orthogonal frequency division multiplexing (OFDM) multi-carrier signal.

52. (New) The apparatus of claim 45, further comprising:

a transmitter configured to transmit the encoded block code using one or more antennas.